

This work is licensed under a  
Creative Commons Attribution-NonCommercial-  
NoDerivs 3.0 Licence.

To view a copy of the licence please see:  
<http://creativecommons.org/licenses/by-nc-nd/3.0/>

Reserve (832)

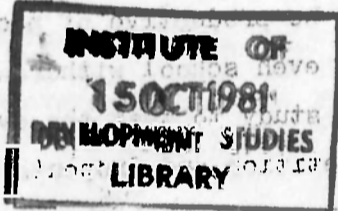
ISSUE 322

SOCIO-ECONOMIC DETERMINANTS OF REPETITION AND EARLY SCHOOL WITHDRAWAL AT THE PRIMARY LEVEL AND THEIR IMPLICATIONS FOR EDUCATIONAL PLANNING IN KENYA

by John A. Nkinyangi  
WORKING PAPER-NO. 325

INSTITUTE FOR DEVELOPMENT STUDIES  
UNIVERSITY OF NAIROBI  
P.O. BOX 30197,  
NAIROBI, Kenya

SEPTEMBER 1977



Views expressed in this paper are those of the author. They should not be interpreted as reflecting the views of the Institute for Development Studies or of the University of Nairobi.

This paper is not for quotation without the permission of the author.

ABSTRACT

This paper attempts to provide a theoretical framework to explain the causes of the high primary school repetition and dropouts in representative regions of Kenya. Theoretical and methodological weaknesses of previous studies in this area and the related question of educational disparities are reviewed and it is suggested that these educational problems can only be adequately explained within the country's socio-economic context.

Accordingly, it is argued that a socio-economic disadvantage is the equivalent of an educational disadvantage, which in turn may be productive of poor school performance, repetition, disinterest, and even school withdrawal. The paper suggests a methodology for the study to test the overall hypothesis that both the phenomena of repetition and dropouts are positively and consistently related to pupil socio-economic background.

## I.0. Introduction

Expenditures on education constitute the largest and often the most rapidly growing component of public expenditures in most developing countries (Coombs, 1968). Public expenditures on education have grown at a faster rate than either total public expenditures, public revenue or national income (IBRD, 1971). A comprehensive World Bank (IBRD) study of 30 developing countries shows that between 1960 and 1965, for example, the share of education in public expenditures increased on the average from 13 percent to 15 percent. In the same period, public expenditures on education rose from 3 percent to 4 percent of GNP (IBRD, 1971). A more recent analysis for 30 African countries for which data were available for the period 1960-1973, shows that the share of education in the public expenditures of those countries increased on the average from 15 percent to 19 percent (UNESCO, 1976).

In Kenya, the education budget has grown more than 100 percent in the past six years pushing the net overall increase in educational expenditure to 14.4 percent for that period (Development Plan, 1970-74; 1974-78). It is estimated that if education continues to grow at the current rate (it now accounts for 40 percent of government recurrent expenditure) then the whole of the government's budget would be taken over by education in a matter of 10 to 15 years (Weekly Review, Nairobi 1976).

This pattern of expenditure attests to a high social demand for education and also reflects planners' and politicians' perception of the importance of education in development. Studies in both developed and developing countries have established a positive relationship between a person's earnings and type and amount of schooling received (for the U.S., see Becker, 1962; for Colombia, Schultz, 1968; for Kenya, Thias and Carnoy, 1972).

The studies cited are to be understood in the light of more recent research and experience which raises serious questions challenging some of the traditional assumptions about the effects of education on social mobility (see, for example, Carnoy, 1973). Equality of educational opportunities does not automatically generate significant changes in income distribution and social mobility since mobility appears to be determined essentially by the pattern of stratification and the socio-economic system of rewards in each society (IBRD, 1974: 33-36; Leys, 1971, 1972, 1973, 1975; Bienen, 1974; Sandbrook, 1975; Court, 1976).

In most of the developing countries the greatest expansion in enrollments has occurred at the primary school level since it is both the base of the educational pyramid and the level of schooling most accessible to members of lower SES (Carnoy, 1971:63). In the last 13 years since Kenya attained Independence from Britain and education became more readily accessible to Africans, enrollments at this level have almost tripled (various Development Plans, 1964-78).

The extent to which expansion at the secondary level has also taken place is best described by President Kenyatta who once told a rally that "it took the British 70 years to build 141 secondary schools in Kenya (but) in the three years in which we came to power, the number increased by 141" (Prewitt cited in Bienen, 1974: 49).

While the popular demand for schooling has risen, there is mounting evidence on the one hand that rapid expansion has created a new set of formidable problems — rising unit costs (Coombs, 1968) and "educated" unemployment (Sheffield, 1967; Kinyanjui, 1974) — and on the other, has failed either to redistribute incomes (Carnoy, 1973) or result in higher economic growth rates (Harberger, 1965; Haller, 1972; Stewart, 1976).

The 1971 and 1974 World Bank Education Sector Working Papers

(IBRD, 1971, 1974) also lament that as enrollments have expanded, and the growth it has become difficult, often impossible, for educational systems to maintain levels of quality and efficiency. Facilities like classrooms, equipment and teaching materials have not kept pace with the expanding number of pupils. Teacher training has lagged behind and the qualification and experience of the teaching force have declined. Consequently, there has been a serious manifest gap in organization, planning, evaluation, and supervision needed to meet the challenge of expansion. The documents conclude that the cumulative effect of all these factors has been reflected in higher dropout and repeater rates.

In a number of the developing countries, one quarter of the education budget is spent on pupils who drop out before reaching Grade IV "without having received any lasting benefit from education" (IBRD, 1974: 5)

There is also a noted increasing polarization in access and promotion based on social class. This is seen in the socio-economic profiles of dropouts, repeaters and successful students, and in the fact that middle and upper income groups are practically over-represented in higher education. In some countries, other factors, such as sex, ethnic origin or religion, are seen to play a role which is frequently combined with the effect of income levels. These inequalities are further aggravated by differences in the quality of teachers, educational facilities, and other inputs between schools serving different geographical areas and income groups (IBRD, 1974: 33)

Sheffield (1971:23) observes that primary school pupils who either drop out before the end of the first cycle or who, having finished it, do not enter a secondary school are rising in number throughout Africa. A chronic problem for them is that they are unable either to find jobs, or, for lack of places, to be admitted to a secondary school. In Kenya specifically, it is estimated that less than half of those who enter primary school complete their education at that level. And of those who reach the final year (Standard VII), only about a quarter of them go on to secondary school (Court and Ghai, 1974:11; Rado, 1974:38; Raju, 1973; Chapter 6). There are also high repetition rates at virtually all grades in the Primary schools (King, 1974).

The magnitude of educational wastages as typified by high repeater and dropout rates is well documented for African primary schools in a recent UNESCO statistical report (UNESCO, 1975). African Ministers of Education meeting in Nairobi in 1968 (UNESCO, 1968) and again in Lagos last year (UNESCO, 1976), described high repetition and high dropout rates as some of the major educational problems facing the continent today.

But that these educational problems are just as prevalent in the rest of the Third World, is well documented by Coombs (1968:71) who speaks particularly of the dropout phenomenon in these global terms:

.....dropouts are encountered at the primary stage and have been a widespread cause for concern. It is not unusual for at least half the children entering the first grade in one of these countries to leave before the end of the fourth year, without even having acquired permanent literacy... What is worse, most of these early dropouts are sentenced to join the ranks of permanent adult illiterates at the bottom of the socio-economic heap....

Findings of previous research that are presented in Section 5.0 point to the evidence that the incidence of repetition and dropouts is not to be interpreted as a result of educational inefficiency alone. Repetition and early school leaving are a demonstration of a general socio-economic disparity. Moreover, much youth unemployment that has accompanied the enrollments explosion may be leading parents and pupils alike, to question the instrumentality of lower-level education for upward mobility.

2.0. THE RESEARCH PROBLEM

It is the main purpose of this study to investigate those socio-economic factors which best explain the causes of high repetition and dropout rates in the primary schools of Kenya. Specifically, we aim to investigate those socio-economic characteristics which best distinguish among regions in repetition and dropout rates. At the pupil-level, we propose to explore those family socio-economic attributes which best differentiate between repeaters and non-repeaters, between dropouts and non-dropouts, and between those in the final grade (Standard VII) Promoted to secondary school and those not promoted. These are the central questions of the study.

Other areas of concern centre on the effects of certain school-related factors like school-type, school quality, school/classroom environment, attendance rates and scholastic achievement, which are seen to influence repetition and dropout rates. The government response to these educational problems will also be assessed.

Part I of the study will be a longitudinal analysis of primary school flows (from 1970) for the eight administrative regions of Kenya. Part II of the study will be a more in-depth field investigation of the causes of repetition and dropouts in 14 schools (N=3,000 pupils) of different types, in four representative regions of the country at different stages of socio-economic development. The government's response to the problems under study will be evaluated through in-depth interviews with relevant officials, teachers, parents, and community leaders.

3.0. SIGNIFICANCE OF THE STUDY

What is the significance of this study? Firstly, most studies on the causes of repetition and dropouts have been undertaken in developed countries (for a review, see Beirn, et al., 1972; Miller, 1964). Their limited focus thus reduces their utility for purposes of educational planning in developing countries. Secondly, for a poor country like Kenya, already spending large amounts of its public expenditure on education, incidence of high repetition and dropout rates can be seen as a wastage of scarce national resources. This is a point of major



concern among academic and official circles and has been referred to once and again in previous research and official reports (see for example, Court and Ghai, 1974; Raju, 1973; King, 1974; Mutua, 1975; and IBRD, 1975:171).

That such a study is also warranted for a better understanding of the process of rewards allocation in contemporary Kenya, is shown by the importance of education in stratifying along the lines of wealth, power and prestige — the three basic dimensions of social stratification (Prewitt, 1972:91). As will be shown in Section 4.0, evidence of this abounds in contemporary Kenya. The present elites having been selected to their positions of wealth, power, and prestige, largely through their possession of a good Western education, seem to be manipulating the machinery of state in such a way as to ensure the same benefits to their children. The implications of this for the much vaunted Kenyan political and economic stability are considerable.

In a study of secondary school admission policies in East Africa, Gould (1974) argues that the long-term political effect of regional disparities in schooling in any African country is differential access to the power and elite structures, because there is, in Africa, a very close relationship between schooling and socio-economic status. Moreover, if access to primary education depends partly on the level of regional development as is the case in East Africa (Mbiliyi et al., 1974; Mwobaho and Mbiliyi, 1974; Meek, 1971), the implications extend beyond the issue of entry into the ranks of the elite. Assuming that participation in education has a long-range, non-specific impact on human capital in terms of mastery of skills (literacy, numeracy, abstract thought, problem solving ability, and modernization), then regional or community differences in access and school retention should augment already existing basic differences across regions and communities.

Thirdly, much of the previous research on the causes of repetition and premature school leaving suffers from a poor conceptual framework. The dropout is often stereotyped as a low achiever (Lichter, 1962); usually below grade level for his age (Jones, 1964); is a member of a low income family in which the parents have low educational attainment (Screiber, 1964), and he participates infrequently

in the extracurricular activities of his peers (Watson, 1963). Clinically-oriented researchers drift into a disability syndrome and find character disorders (Lichter, 1962) while their sociologically-oriented counterparts tend to find disorganized families and the associated evidence of poor early socialization (Rohrer, 1964). For a review of these approaches, See Tannenbaum (1966).

These approaches, however, tend to draw our attention to developmental failures and away from a more realistic and complete synthesis of the problems. According to Dentler (1968:5-8), the attributes that are considered as a disadvantage leading to drop out are not only aspects of a general pattern of stratification but are a circular statement of what is involved in school withdrawal. They point out that a socio-economic disadvantage is the equivalent of an educational disadvantage, which in turn is productive of poor school performance, repetition, disinterest, and even withdrawal.

Such studies as exist on the repetition problem in Kenya suffer from a poor theoretical framework. King (1974), for example, sees repetition as a malfunctioning of the educational process and does not consider the intervention of socio-economic factors although he alludes to their importance. His study therefore concentrates on repetition at the higher grades which is generated by the secondary school examination selection effects thus ignoring the prevalence of repetition at lower grades which may be more related to pupil socio-economic background and poor school socialization effects.

As to the dropout problem, much casual observation exists in the Kenyan educational literature as to its socio-economic base. To the best of our knowledge, however, there have been no attempts to verify these claims empirically. King (1972) looked at certain aspects of this problem in his research among the Masai of the Narok District of Kenya but his scope was narrow and his findings are not easily generalizable to other areas of the country.

Our adopted conceptual framework hopes to examine the causes of repetition and dropouts as part of the political economy of general social stratification that characterizes present-day Kenya. We hope that our holistic framework will not only help understand the socio-economic forces that are involved in these

repetition and dropping out processes, but that in so doing will also call attention to their implications for official policies.

#### 4.0. THE CONCEPTUAL FRAMEWORK

The evidence from previous studies that is presented in Section 5.0 points to the importance of pupils' socio-economic status (SES) in determining repetition and dropouts. The measures for socio-economic status that most of these studies use are parental education, occupation, and incomes. We propose to use these same measures in our study of the causes of the high repetition and dropout rates in the primary schools of Kenya. It is important, however, that we justify our choice of these measures and point out their applicability in explaining repetition and dropouts in the Kenyan case. This is done through an analysis of the political economy of social stratification in Kenya.

##### 4.1. The Relevance of the Social Class Concept:

The concept of social class is useful because it refers to more than just the effect of parental education, occupation, incomes, or any of a number of correlated variables that are used to measure socio-economic status.

As Kohn (1963:471) has pointed out, the concept of social class is useful because it captures the reality that the intricate interplay of all these variables play in creating basic conditions of life at different levels of the social order. "Members of different social classes, by virtue of enjoying (or suffering) different conditions of life, come to see the world differently — to develop different conceptions of social reality, different aspirations and hopes and fears, different conceptions of the desirable."

This definition of social reality and its concomitant aspirations, may be the root to explaining the barriers which operate to reduce educational participation of children from lower class origins relative to those from higher ones. (Participation in this sense is understood to refer to the equal probability of representative persons from different social origins achieving the same amount of educational participation in both a qualitative and a quantitative sense). After his recent cross-national study of Western Europe, Levin (1976:16-17) concluded that there are two such major barriers. Firstly, there are barriers external to the school, and secondly, there are barriers

within the school structure as well.

Levin argues that the barriers external to the school may include such factors as family expectations and limited incomes. The lower class family may have lower expectations for its children with respect to education. On the other hand, lower incomes may restrict the provision of funds for tuition, books, uniforms, and other charges for special courses or examinations. Levin further argues that the intellectual stimulation that reinforces the schooling experience is less likely to be present in lower class families than it is likely to be in more privileged ones. The barriers within the school structure include the systematic differences in educational resources between schools registering different student clienteles such that better teachers, facilities, and other educational facilities are available to children from higher social class origins compared to those of lower class backgrounds.

Levin's conclusions are supported by a number of studies that we cite in the review of the literature. In the United States, for example, Kohn (1963) found parents of different social classes to have different educational and occupational aspirations for their children. In most of the developing countries, there is a noted polarization in access to schooling and promotion largely based on social class. This is seen in the socio-economic profile of dropouts, repeaters and successful pupils, and in the fact that middle and upper income groups are particularly over-represented in higher education. According to the World Bank Education Sector Working Paper (IBRD, 1974:33), in some countries, other factors such as sex, ethnic origin or religion, play a role which is frequently combined with the effect of the pupils' family socio-economic status. These barriers are further aggravated by differences in the quality of teachers, educational facilities, and other inputs between schools serving different geographical areas and income groups.

Except for casual observation, in Kenya, little is known about the socio-economic factors that influence dropouts. On the other hand, studies that have looked at the causes of repetition have seen the phenomenon as a result of educational inefficiency and have therefore not explored the socio-economic

variables that may be involved as well (see for example, King, 1974). As will be shown under our discussion of social stratification in Kenya, there are huge disparities in regional development, incomes among members of the different social classes, and allocation of resources between regions and schools serving pupils of different social clienteles. We would therefore expect to find the same socio-economic phenomena that have been seen to influence repetition and dropout in other countries to be equally as operative in Kenya. A number of pertinent peculiarities, however, need to be pointed out in the Kenyan case.

The cost of education is particularly high at all levels, including the primary school, in relation to the ability of most families to pay for it. We would expect this to be closely related to the phenomena of repetition and dropout in the primary schools. Raju (1973:49) argues that:

The difficulty of finding money to pay for the education of sons and daughters is the main cause of the premature withdrawal of pupils from school. This problem affects most families especially when the child has to repeat a year.....

These educational phenomena are much more complex than Raju explains them and to our knowledge, the socio-economic factors that may be involved have not received adequate theoretical consideration. The element of repetition is particularly a contradictory relationship: first of all, repetition should not exist because of the policy of automatic promotions between grades. High repetition rates, however, are prevalent at all grade levels (Ministry of Education, Annual Report, 1973:24-25, Government Printer, 1973). Secondly, there seems to be two types of repetition — that at the lower grades (Standards I - IV) and that at the higher grades (Standard V - VII).

As is argued in the next sub-section, upward mobility in Kenya is partly determined by the possession of the necessary higher education credentials. The emphasis on certification means that success at each educational level is the basis for selection to the next higher level. The effect of this mechanism is particularly operative in secondary school selection and accounts for repetition in higher grades (Court and Ghai, 1974; King, 1974). Repetition in those grades (particularly Standard VII) has been found to result in dramatic improvement, sometimes ranging from 7 - 16 points in the Certificate of Primary Education (CPE) examination. This has resulted in demonstration effects which

have led to increased repetition among less-able pupils (King, 1974:140). King also argues that repetition in those grades may be a function of secondary school development in the different regions. Thus, in our research, we would expect repetition rates at the higher grades to be related to the regional level of secondary school development.

The Secondary school selection effect, however, seems to be closely related to pupils' socio-economic background in influencing repetition at the higher grades. Because of the interaction of the school fees effects, it may be that repeaters at these grades are more likely to be from those families which cannot best provide the necessary tuition, additional books, private coaching, and other necessary preparation to ensure selection to secondary school. It may also be possible for poor peasants to amass scarce resources so that their children can repeat CPE and hopefully be selected to a secondary school. This, however, may be at the expense of younger offsprings either dropping out or marking time in the lower grades where minimal school fees have been abolished. The interaction between secondary selection effects and pupils' family economic background may therefore well be the link in understanding repetition at the two levels, and particularly in explaining repetition at the lower grades despite the fact that promotion at these and other grades is supposed to be automatic. In fact, the broad hypothesis we are making is that repetition at both levels is related and may even be a function of pupils' family socio-economic background.

Children from more privileged families may also have had prior introduction to schooling through nursery schools (more "socialized" to appreciate the role of schooling) and may be less likely to repeat in lower grades than children from less privileged families. Further, as the review of the literature indicates, different aspirations for children's education and future occupational roles may explain differences in educational participation in both a qualitative and quantitative sense among parents of different social classes. This for example, may explain differences in participation among the sexes that has been pointed out by a number of studies that are cited. In their recent evaluation of the Kenyan educational system, Court and Ghai (1974:17) observe that:

Fewer girls than boys go to school, on work their way up the educational ladder. There are fewer places for them and the main reason for this is less pressure from parents to have their girls educated. This reluctance has little to do with traditional attitudes towards women. It is rather that families who cannot easily afford to send both sons and daughters to school reckon that the financial returns to expenditure for girls' education are a good deal smaller than those for boys.

\*\*\* School fees in Standards I-IV were abolished by Presidential Decree in 1974. The impact of the abolition, however, may have been countered by the need of some school committees to charge "building fees" to put up additional facilities to cater for the swollen numbers. Overcrowding and the effect of these new fees are seen to have resulted in high dropout rates in 1974 (Ministry of Education, Annual Report, 1974:14, Government Printer, 1974).

In a 1967 manpower survey, Thias and Carnoy (1972) found a strong relationship between parental education and the schooling level of their offspring: if his parents were literate, a respondent had on the average, 60 percent higher education than if they were illiterate. For females, this figure was 75 percent. The average father's education of well educated respondents (12-13 years) was 5.6 years compared to 0.2 years for the fathers of the uneducated respondents (0 - 2 years of schooling).

Thias and Carnoy also found the earnings of the better educated to be consistently higher than of the less educated and an increase in earnings at each gradation in schooling. In one of the regions studied (Central Province), self-employed small landowners with 9 or more years of schooling were found to have an income of over three and half times that of the illiterate farmer. There was also an increase in earnings with each gradation in schooling between these extremes.

While the Thias and Carnoy study is a rough indicator of the rate of remuneration for the "educated class" a few years after independence, its basic findings must now be qualified in the light of more recent evidence. The more up to date World Bank Mission Report of Kenya (IBRD, 1975:272) cautions that:

These differentials no longer make sense, if they ever did in terms of supply and demand in the labour market. The problem of school-leaver unemployment has become increasingly severe. At all, but a few levels (usually very senior), supply exceeds demand at the ruling wage rates.

Nevertheless, there is also evidence that for those who succeed to enter the ever diminishing job market, the rewards can be considerable. Some educationally qualified people with relatively low skills can earn incomes that are large multiples of minimum formal sector wages (IBRD, 1975:271). A stenographer with government, for example, can earn incomes that are not only large multiples of minimum formal sector wages, but even larger multiples of incomes to be earned in non-formal activity (The ILO Report, 1973:254). In a study of entrepreneurship and development, Marris and Somers (1971) were led to conclude that Kenya is a society in which rewards for the educationally qualified people in employment far exceed the returns of all but the most successful entrepreneurs.

According to Prewitt (1972a cited by Court, 1976:32), the emerging functionalist ideology in Kenya seems to have official sanction from the Ndegwa Commission Report. The Ndegwa Commission Report (Government Printer, 1971) is a document produced by the governing elite and deals with public sector remuneration. Court (1976:7) argues that the document provides a concise ranking of Civil Service occupational categories in terms of their perceived importance to society and their required educational qualifications. The document then

proposes corresponding reward levels with an overall ratio of 36:1 between the highest and the lowest scales. These differentials are supported in the text by justifying language.

The long-term effects of the ruling elites' largely self-perpetuating policies, however, are better underscored by the development policies that have been espoused since independence. Such policies put emphases on fast economic growth and on training the necessary skilled manpower to cope with that growth (Government Printer, 1965a, 1965b). The high demand for education that has been observed in Kenya since independence has been explained as a rational response by the peasantry to tap the benefits arising from the government's policies on fast economic growth. It has also been argued that this demand may be waning to the extent that high dropout rates may be an indication of disillusionment by parents and pupils alike in the power of (low-level) education for upward mobility (for arguments in this regard, see Brownstein, 1972).

The government document outlining the official development ideology is titled, African Socialism and its Application to Planning in Kenya (Sessional Paper No. 10, Government Printer, 1965). The document's emphasis on fast economic growth is based on the belief that social justice can be achieved only by sharing wealth, not poverty. The generic economic elements of the development strategy are therefore: a conception of development as, at least in the short-run, maximizing production rather than ensuring social equality; a decision that development in this sense can best be stimulated by the prod of the profit motive and the associated institution of private property; a considerable reliance upon foreign capital and expertise to modernize the economy; and the official encouragement of indigenous capitalism in the urban and rural areas (Sandbrook, 1975:4).

The Sessional Paper on African Socialism assumed that equitable distribution of wealth would occur through the African ownership and occupancy of a rising number of highly rewarded opportunities in the formal sector. Africanization and expansion of the formal sector were therefore encouraged by government policies concerning credit, loans, and other incentives to "progressive" farmers and businessmen. In the rural areas, specifically, development was supposed to take place through individual enterprise and ownership of resources — in this case, land. The government policies in this regard appeared very similar to the colonial Swynnerton Plan which tried to build a cooperative and conservative landed middle-class among the Kikuyus of central Kenya (Sorrenson, 1967).

Thus, while Sessional Paper No. 10 preached African Socialism, its inherent ideology was markedly capitalist. Some scholars (see for example, Leys, 1971, 1972, 1973, and especially 1975) have dismissed the document as a pure re-statement of "bourgeois socialism" (that is focused on redressing social grievances in

order to ensure the continued existence of bourgeois society') skillfully adopted to the interests of the comprador elements in a neo-colonial situation. Even more liberal scholars (see for example, The ILO Mission Report, ILO, 1973; and the World Bank Mission Report, IBRD, 1975) question the wisdom and the continued prospects of such dependent capitalism. For a more general discussion of this problem and a statement of the new conventional wisdom on redistributive justice, see Redistribution with Growth (Chenery et al., 1974).

The general conclusion that can be drawn is that the country's chosen style of development seems more and more to stratify its citizenry on socio-economic lines rather than fostering the social equality envisioned in official pronouncements. Sessional Paper No. 10 (pp. 12 - 13), for example, stated that:

No class problem arose in the traditional African society and none exists today among Africans. The class problem in Africa (Kenya), is therefore, largely one of prevention..... In addition, Kenya has the special problem of eliminating classes that have arisen largely on the basis of race.

It is beyond the scope of this paper to engage in the polemics of whether or not traditional African societies were classless. Nyerere (1967) and Kenyatta (1965) present plausible arguments that African societies in what is now Tanzania and Kenya were basically egalitarian. Their accounts have been corroborated by anthropological studies (for a review, see Mwaniki, 1973, Chapter 2). However, the claim that "the class problem is one of eliminating the social classes that have arisen largely on the basis of race," is at best a half-truth. It has been stated that at the time of independence, the Africans who took charge of the statecraft were differentiated from the mass of the people by their possession of a (higher) Western education.

But that Kenya has, or is, rapidly turning into a class-society, can all too well be inferred from the trend of events. Sandbrook (1975) and Leys (1975) have both paid special attention to the emerging social classes in Kenya. Their analyses show five different social formations that are distinguished by their varying socio-economic means and living styles. These are:

1. a small national bourgeoisie (Sandbrook calls it the "political class") made up of three frequently discordant groups: the politicians (MPs, Cabinet Ministers, county and municipal councillors), top civil servants and heads of parastatal organizations, and top military and police officers.
2. an urban industrial bourgeoisie and a small group of large-scale capitalist farmers. These are no more than 10,000 among a population of about 13 million. This social class is still largely made up of Europeans, Asians, and the emerging "progressive" African farmers and businessmen who have benefited from the government's credit and loans programmes (Leys, 1971: 311-312). Generally though, this whole group is largely dependent on the "political class" for its initial opportunity to start businesses, purchase land, and for extension services.



3. a petty bourgeoisie. This is a much more diffuse and indigenous social formation numbering in the tens of thousands and includes Africans and Asians in trade, transport, construction, small-scale manufacturing, and house rental (Leys, 1972).
4. an embryonic proletariat consisting of urban workers and others engaged in work on large farms, as casual labour, or in self-employment. Only about 10 percent of the work force are non-agricultural wage earners. Members of this sub-category are concentrated in three urban centres (Nairobi, Mombasa, and Kisumu), with more than one-half in the vicinity of Nairobi alone (Sandbrook, p. 12). Sandbrook argues that this social formation cannot be described as "proletariat" in the real Marxian sense since it does not rely wholly on selling its labour power to maintain its livelihood. Many African workers still retain some rights to the land but according to Sandbrook, urban workers are increasingly getting committed to long-term employment and to this extent they constitute an "embryonic proletariat."
5. a large category of peasants comprising about 90 percent of the population. The peasantry live on small plots of land, sometimes averaging no more than 2 acres. They rely on simple modes of production (i.e. family labour and simple technology) for their existence and to produce goods for the market as well.

Major differences in household incomes across these social classes can be deduced from information contained in Table I overleaf.

TABLE I: HOUSEHOLD INCOME DISTRIBUTION BY INCOME GROUP AND INCOME SIZE,  
1968 - 70.

ECONOMIC GROUP	ANNUAL INCOME (in Kenya £s)	HOUSEHOLDS (in 1000s) approx.
Owners of medium-sized to large-scale non-agricultural enterprises in the formal sector of commerce, industry and services; rentiers; big farmers; self-employed professionals; holders of high level jobs in formal sector.	1,000 and over	30
Intermediate-level employees in the formal sector; owners of medium-sized non-agricultural enterprises in the formal sector; less prosperous big farmers	600-1,000	50
Semi-skilled employees in the formal sector; prosperous smallholders; better-off owners of non-agricultural rural enterprises; a small proportion of owners of enterprises in the formal sector.	200-600	220
Unskilled employees in the formal non-agricultural sector; significant proportion of smallholders; most owners of non-agricultural rural enterprises.	120-200	240
Employees in formal sector agriculture; a small proportion of unskilled employees in the formal sector; better-off wage earners and self-employed persons in the informal urban sector; a small proportion of owners of non-agricultural rural of non-agricultural rural enterprises.	60-120	330
Workers employed on small holdings and in rural non-agricultural enterprises; a significant proportion of employed and self-employed persons in the informal urban sector; sizeable number of smallholders	20-60	1,140
Smallholders; pastoralists in semi-arid and arid zones; unemployed and landless persons in both rural and urban areas.	20 and less	330
<b>TOTAL</b>		<b>2,340</b>

SOURCE: The ILO Report on Employment, Incomes and Equality: A Strategy for Increasing Productive Employment in Kenya. Geneva: ILO, 1973:74 Table 25.

The figures of household incomes and the numbers of households in the different categories are only approximates, nevertheless, they do seem to indicate that the real discontinuity occurs only with the 12.9 percent or so of the households that earn incomes over Kenya Pounds (K£) 200. Up to that point, that is, among the 87.1 percent or so of the households with less than this, the range of variation is narrow. This confirms the impression made by casual observation, which is that there is a solid equality of wealth, or if you don't like euphemisms, of poverty, among the mass of the people.

The more privileged classes are more distinguished by their taste for conspicuous consumption: they send their children to better or "High Cost" schools; they belong to exclusive clubs previously restricted to Europeans; and have recently acquired a new name, "Wabenzi" — the Mercedes-Benz class.

The class differences that have been discussed are further exacerbated by great disparities in levels of regional development arising not only from varying natural geographical endowments but also as a result of the contradictions of the largely self-serving development policies that the ruling elites have adopted since independence (see Leys, 1975). The ILO Report (1973:301) speaks of these disparities:

Differential access on a regional basis to such advantages as roads, education and development projects is closely related to (family) economic disparity, and is thus a major force behind migration, both from the country to the towns and from one rural area to another. Particularly serious is the way in which regional imbalances interact with tribal fears and forces, partly as a cause and partly as a result. The Report of the National Assembly's select Committee on Unemployment showed tribalism to be an aspect of regional and ethnic inequality with serious effects on social and economic progress: 'Where tribalism exists, many of the recommendations made in this report (for example, equitable distribution of development efforts geographically, equitable distribution of incomes, decentralization of industry, efficiency in the Civil Service) cannot be implemented.'<sup>2</sup>

A brief note on the issue of "tribalism" is in order. While we do not deny the impact of tribalism in development efforts, its real effect, at least in the case of Kenya, should be qualified in the light of "clientelist politics" operative in the country. It can reasonably be pointed out that regardless of ethnic background, the elites are generally homogeneous in their class interests and that it is they who first define development problems in tribal or ethnic terms and then socialize the masses accordingly. (On the ideology of tribalism, see Mafejo, 1971:253-261).

<sup>2</sup> Kenya Government: National Assembly, Report of the Select Committee on Unemployment. Nairobi: Government Printer, 1970.

The disparities that have been described are particularly expressed in regional school enrollment inequities. The relative primary school enrollment, for example, varies by as much as a factor of 9 between provinces (IBRD, 1974:15). Central Province and Nairobi, for example, register nearly 100 percent of the eligible age-cohorts, while North-Eastern Province on the other extreme, about 5 percent. Further, even where school places are available, the quality of instruction and facilities varies considerably. Central Province, again, has over 26 percent of all trained primary teachers in Kenya although it has approximately 15 percent of primary age children. Nyanza Province which is most populous in school-age children has only 13 percent. Geographical differences are also expressed in rural and urban educational disparities. Private nursery schools and the prestigious, better-staffed government-aided schools ("High Cost" schools) are nearly always located in or near urban centres. Thus, where you happen to grow up may sharply affect not only your access to primary schooling but your performance in it as well (Prewitt, 1974).

Since family socio-economic background has been seen to influence access to schooling, it is reasonable to assume that it also influences the ability of the lower-class child to remain in school once in the system. Since differential access to the schooling system very much parallels regional economic disparities, it is also safe to assume that incidence of repetition and dropouts very much parallels the same lines.

What has been Kenya's strategy for minimizing the regional and individual discontent attendant upon the kind of disparities that have been discussed? The government response is specially important since it has serious implications for continued social stratification in Kenya.

#### 4.3. The Ideological Response to Social Stratification:

The official response to rising social stratification can be seen at two basic levels. Court and Prewitt (1974:110) argue that while there has been no comprehensive attempt at the redistribution of resources, as has been attempted in Tanzania for example, the principal strategy of the elites in Kenya has been that of exhortation:

The constant message of perambulating Ministers extols the virtues of unity and faith in Central Government as the sure sources of the stability and hence economic progress on which the well-being of all depends. The most effective symbols manipulated on behalf of this cause have been the concept of 'Harambee', with its emphasis on community and national 'togetherness', and the figure of the President himself. Meanwhile it is assumed that schools in some unspecified way are contributing to the cause of national unity...

On another plane, Court argues that the official response increasingly appears to be a version of the functional theory of stratification. He cites evidence from The current Development Plan (1974 - 78:1:3), which justifies government income distribution policies in these terms:

In order to achieve the social objective of the Plan, measures will be undertaken in order to minimize income differentials. Firstly, the better off members of the community will contribute proportionately more to government revenue through taxation. All will continue to have the opportunity to contribute also through voluntary Harambee (self-help) projects. Secondly, the focus of the last Plan on development of rural areas, where incomes are lower than the national average, will continue. Thirdly, government's provision of education and health services will be accelerated. Finally, the present Plan provides opportunities for everyone to participate actively in the economy and in so doing improve his standard of living. Such improvements are bound to be achieved more quickly by some than by others, however. Equal income for everyone is therefore not the object of this Plan. Differences in skill, effort, and initiative need to be recognized and rewarded... (emphasis added)

Court argues that / this meritocratic ideology sees individual differences in wealth and status as necessary and beneficial and propagates a concept of social justice which aims less at the equalization of wealth and status than the equalization of opportunities to compete for the most privileged positions. The corresponding educational system mirrors that same ideology and uses examinations to select, promote and later confer rewards. The catchwords of Kenya's educational ideology therefore become expansion, equality of opportunity and advancement by merit. The importance of such an ideology for conflict-resolution is clearly understood in a stratified society and may probably explain why less privileged persons and groups seem largely to have internalized their misfortunes. The existence of social mobility, providing an opportunity for some to move from the lower to the upper ranks in society, tends to ease some of the incipient tensions associated with inequality. Furthermore, by offering a personal escape route from low status, it tends to weaken interest in collective efforts by those who remain. To the extent that upward mobility is a reality for some and is believed to be possible for all, it serves to disperse some of the incipient antagonisms of the disadvantaged towards the advantaged. This explains why the ruling elites have not directly tried to curb educational expansion.

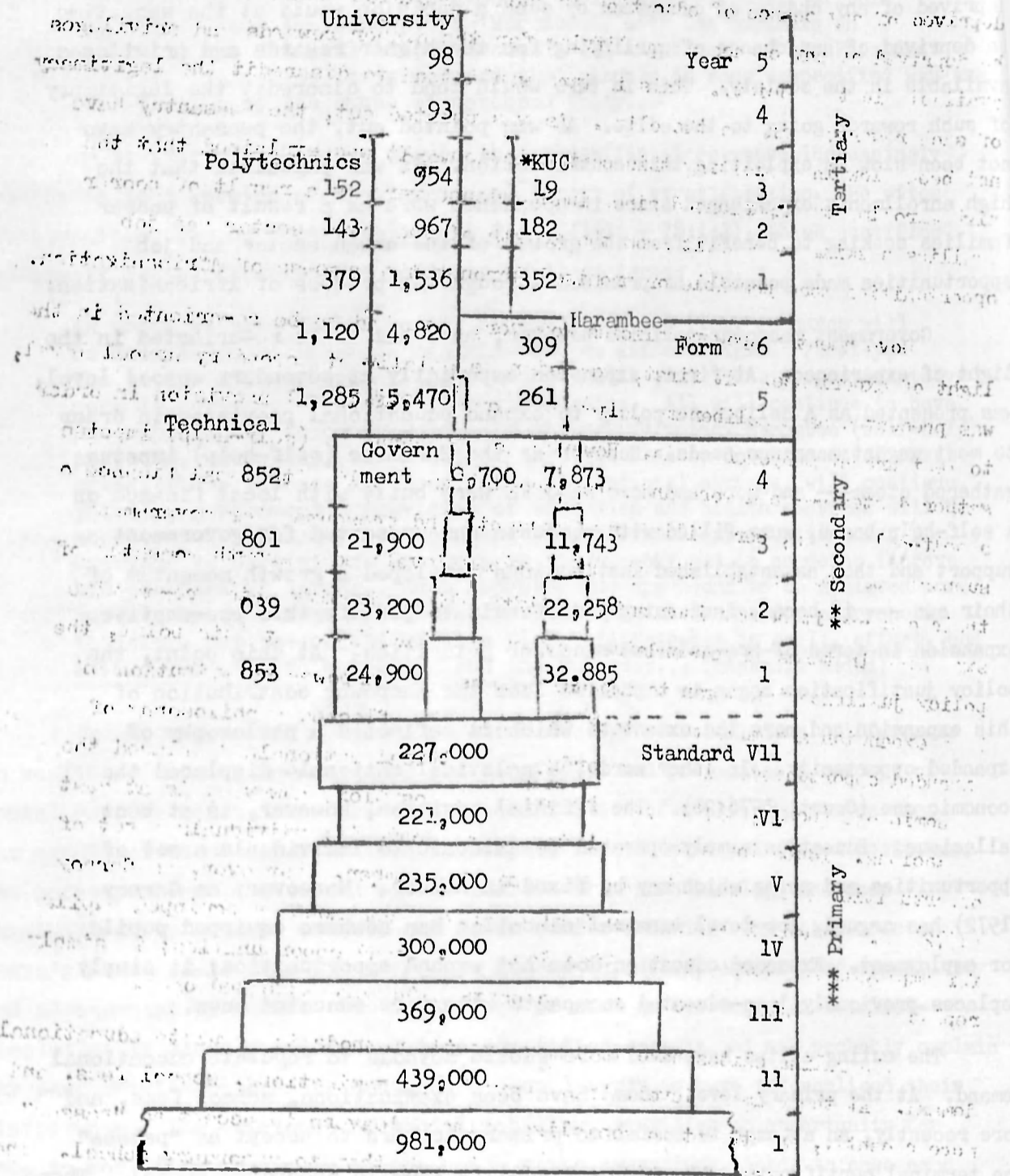
In a forceful argument, Court (1976:20) maintains that to curb educational expansion without altering the reward structure would be to admit that those deprived of any chance of education by such a decision would at the same time be deprived of any chance of qualifying for the higher rewards and privileges available in the society. This in turn would tend to discredit the legitimacy of such rewards going to the elite. As was pointed out, the peasantry have not been slow in exploiting this contradiction. It was explained that the high enrollments experienced since independence were as a result of poorer families seeking to benefit from the growth of the urban sector and job opportunities made possible or promised through the process of Africanization.

Government manpower-policies however, have had to be re-oriented in the light of experience. At first, expansion especially at secondary school level, was presented as a deliberate policy to expand educational provision in order to meet urgent manpower needs. However as the Harambee (self-help) impetus gathered steam and more and more schools were built with local finance on a self-help basis, were filled with students and presented for government support and then as established institutions developed a growth momentum of their own -- it became increasingly difficult to justify this pre-emptive expansion in terms of pre-ordained manpower priorities. At this point, the policy justification began to emphasize less the manpower contribution of this expansion and more the extent to which it reflected a philosophy of expanded opportunity. In other words, a political rationale displaced the economic one (Court, 1976:20). The official position, however, is at best fallacious. Education simply operates to allocate to individuals a set of opportunities and roles which may be fixed in number. Moreover, as Carnoy (1972) has argued, low-level terminal education has nowhere equipped pupils for employment. Expanded education does not expand opportunities; it simply replaces previously less-educated occupants with more educated ones.

The ruling elites have used more subtle methods to regulate educational demand. At the primary level, these have been examinations, school fees, and more recently, an attempt to socialize primary leavers to accept as "passes" the terminal certificates which did not qualify them to secondary school. There have also been orchestrated attempts to glamorize vocational and non-formal education. (For a good critique of non-formal education, see Beck and Papagiannis, 1975). The combined success of these official attempts to curb educational demand may be one hint of understanding the sharply pyramidal nature of Kenyan education. (See Fig. 1 overleaf).

**Kenya: Enrolments 1973-74**

Fig. 1



\*\* Secondary figures for 1973

\*\*\* Primary figures for 1974

\* KUC Kenyatta University College

SOURCE: H.W.R. Lawes et al., An African Primary curriculum Survey. Country Profile: Kenya. London: University of London, Institute of Education, 1976:7

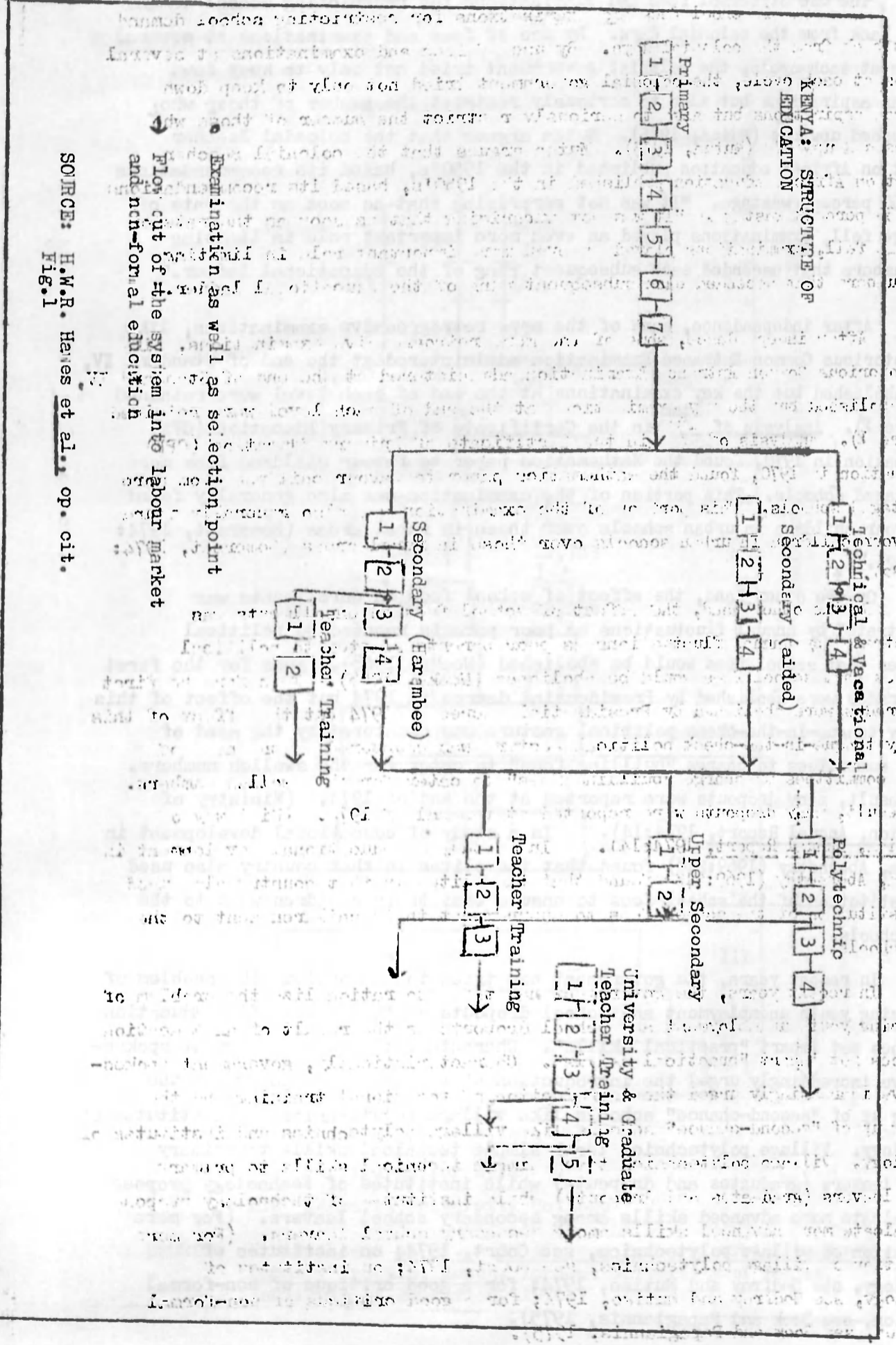
The use of school fees and examinations for restricting school demand dates back from the colonial days. By use of fees and examinations at several points at each cycle, the colonial government tried not only to keep down African aspirations but also to seriously restrict the number of those who progressed upwards (Mutua, 1975). Mutua argues that the colonial Beecher Report on African education published in the 1950's, based its recommendations on a 50 percent wastage. "It was not surprising that as soon as the rate of wastage fell, examinations played an even more important role in limiting the numbers that ascended each subsequent rung of the educational ladder."

After independence, some of the more retrogressive examinations, like the notorious Common Entrance Examination administered at the end of Standard IV, were abolished but the key examinations at the end of each level were retained (Figure 2). Analysis of <sup>items</sup> in the Certificate of Primary Education (CPE) examination in 1970, found the Mathematics paper to favour children from more advantaged schools. This portion of the examination was also generally found to favour children in urban schools over those in rural areas (Somerset, 1974: 155-182).

On the other hand, the effect of school fees on enrollments was demonstrated by annual fluctuations as poor parents reacted to political promises that school fees would be abolished (Weeks, 1968). Fees for the first four grades were abolished by Presidential decree in 1974 but the effect of this largely tongue-in-the-cheek political gesture was countered by the need of school committees to charge "building fees" to cater for the swollen numbers. As a result, many dropouts were reported at the end of 1974. (Ministry of Education, Annual Report, 1974:14). In a study of educational development in Nigeria, Abernethy (1969:248) found that the elites in that country also used the institution of the school fees to ensure that their children went to the best schools.

In recent years, the government has tried to rationalize the problem of increasing youth unemployment and school dropouts as the result of an Education that does not impart "practical skills". Characteristically, government spokesmen have increasingly urged the introduction of vocational training and the setting up of "second-chance" schools like village polytechnics and institutes of technology. Village polytechnics teach simple technical skills to primary school leavers (graduates and dropouts) while institutes of technology propose to inculcate more advanced skills among secondary school leavers. (For more information on village polytechnics, see Court, 1974; on institutes of technology, see Godfrey and Mutiso, 1974; for a good critique of non-formal education, see Bock and Papagiannis, 1975).

Fig. 2 Structure of Education



SOURCE: H.W.R. Hawes et al. op. cit. Fig. 1

- Examination as well as selection point
- Flow cut of the system into labour market and non-formal education



From our discussion of social stratification in Kenya, it can be inferred that official proclamations to "make education more relevant" are no more than just an ideological front to pave the way for the instatution of differential curricula for the different social classes. After her research in East Africa, Mbilinyi (1974) concludes that:

Innovations such as village polytechnics in Kenya and agriculturally-based curricula for Tanzania primary schools cater for rural peasants, 'the less fortunate, less able' of our underdeveloped societies — less able, in that a much greater proportion of rural primary school leavers do not enter secondary school, are defined by society as 'failures', and find their education to be a terminal one.

Attempts are also rife to try and introduce educational media as a way of cutting back on rising unit costs due to educational wastages like repetition and dropouts. In the less-developed areas inhabited by nomadic pastoralists, the government has been experimenting with boarding schools to try and increase school retention in those areas. (Primary schools in other parts of the country operate on a day-release basis.) The great hopes pitched on these institutions, however, seem to be fading. After investing great amounts of money in the projects, the government admits all too candidly that the effort has been a failure. "The cost per pupil has been extremely high for boarding facilities and the actual response poor in terms of increased enrollments by people indigenous to those areas (emphasis added) (Development Plan, 1974-78:1:412). The government is now thinking in terms of scrapping the boarding programme and of introducing mobile schools (Development Plan, 1974-78:2:68). Few details are available on the real meaning or scope of the mobile schools from the government or UNESCO experts who are cooperating in the establishment of this innovation.

4.4. Summary: We have discussed the emergence of social stratification in Kenya and pointed out the need to study the nature and processes of repetition and dropouts within the total social structure. We have also discussed the role of education in stratifying the citizenry along the lines of wealth, power, and prestige — the three basic dimensions of social stratification.

The broad conclusion that can be drawn from the preceding discussion was already tentatively suggested by the ILO Report (ILO, 1973), Prewitt (1974:207), and Court (1976); although the school system seems to have been remarkably open in that the bulk of pupils have come from peasant backgrounds, there is also some evidence to suggest that family background factors and pre-school experience may be having an increasing influence upon recruitment and subsequent performance.

It may therefore be that in the near future, those benefitting most from schooling are likely to be those with previously advantaged parents who are able to provide first, the kind of home background and then the kind of school which enables the child to take the most advantage of the present selection procedures. And since access to a higher education and to scarce productive assets such as land, capital, and credit are the chief vehicles to high incomes in Kenya, it seems likely that groups of persons who already possess these advantages will further be able to consolidate their economic power and affluence thus perpetuating the process of social stratification.

#### 5.0. SOCIO-ECONOMIC DETERMINANTS OF REPETITION AND DROPOUTS

5.1. Regional Aspects, SES, and Attendance: A number of studies have shown the regional auspices of a school — whether rural or urban, location, and level of regional development — to be important in determining repetition and/or dropouts. This status is often combined with the effects of pupil socio-economic background.

A number of early studies in rural United States provide valuable insights into what appears to be one of the most important factors governing school attendance — the opportunity costs of pupils' time. McIntire (1918) and Folks (1920) reported a strong influence of seasonal farm demands on pupils attendance. McIntire (p. 537) noted that farm and housework were responsible for nearly half the absences. Retardation in school work was found coincident with non-attendance. This was found to lead to dropouts. Reavis (1928) who also examined a number of important factors in rural United States, found distance from school to be an important determining variable, and to a lesser extent, the salary, educational level, and experience of the teacher. In many developing countries, distance from school and the opportunity costs of student time are acknowledged as some of the important factors influencing attendance, and therefore repetition and dropouts.

A number of UNESCO documents that overview aspects of the relevant literature (see for example, International Bureau of Education, 1969, 1972; Brimer and Pauli, 1971), conclude that non-school variables, particularly the opportunity cost of students' time, the lack or unavailability of schools, are more important

determinants of dropping out than are such school quality variables as teacher quality and class size. Nonetheless, such school quality variables as teacher education and experience do make a difference in some studies.

In their Indian study, Sharma and Sapra (1971) found dropouts and non-dropouts to differ in their attendance rates. Pupils with less than a 60 percent attendance rate were seen to be potential dropouts. In their Nicaraguan study, Jamison and McNally (1975) found attendance to fluctuate with the farming calendar in rural areas. Agricultural family status was found to be significantly related to non-attendance. In Kenya, the great majority of the people work on the land and derive most of their income from farming. It has therefore been observed that poor families who cannot afford to hire extra help find it necessary to draw children from school to work on the family farm or look after cattle (Raju, 1973:49). In the United States, Duncan (1965) found the regional location and the urban-rural status of the place of residence to be secondary to family background in explaining the incidence of dropouts. This finding is further corroborated by some evidence from East Africa. Mbilinyi (1969, 1974) found regional and locational effects in Tanzania to be less important than the sex of the child, family background, and the traditional social structure and stratification among peasants and traders in rural areas.

From the findings of the above cited studies, we may anticipate to find that in Kenya repeaters and dropouts are more likely to be from rural than urban schools. We would also expect to find more females than males to be repeaters or dropouts and more repeaters and dropouts to come from agricultural and pastoralist families than from non-agricultural and non-pastoralist families. We would however expect these effects to be countered or moderated by pupil family background characteristics.

**5.2. SES and Scholastic Achievement:** A number of studies have found a family's social class definition to influence the academic achievement of its children. Limited incomes among lower class families have been found to restrict the provision of tuition fees, school books, and other materials necessary to ensure good performance (Levin, 1976). On the other hand, lower-class families have been found to have lower aspirations for their children than upper-class families. In addition, some of the studies have concluded that the intellectual stimulation that reinforces the schooling experience is less likely to be present in lower-class families than it is likely to be in more privileged families.

In a study of social class and parent-child relationships in the United States, Kohn (1963:474 - 475) found differences in values between middle and working-class parents in child expectations. The middle-class want their children to be eager to learn, to share, and cooperate, while the working-class encourage conformity to externally imposed values. The middle-class value curiosity, happiness, consideration (i.e. exercise self-control and are less alienated) than do working-class parents. That middle and working-class parents value different characteristics in children must be a function of differences in their conditions of life. Kohn (p. 476-477) amplifies this argument further:

For a sufficient explanation of class differences in values, it is necessary to realize that other differences in middle and working conditions of life reinforce the differences in occupational circumstances at every turn.... Educational differences, for example, above and beyond their importance as determinants of occupation, probably contribute independently to the differences in middle and working class parental values.... Middle-class parents' greater attention to the child's internal dynamics (i.e. reinforcement of the child's inquiry faculties, motives and feelings, happiness etc.) is facilitated by their learned ability to deal with the subjective and the ideational.

Kohn's arguments are confirmed by a number of dropout studies. In their study of dropouts in the elementary and middle-level schools of India, Sharma and Sapra (1971) found parents' views of a child's educational performance and educational stimulation in the house to distinguish between dropouts and non-dropouts. In an Ethiopian study seeking to compare dropouts and non-dropouts on a set of family background variables, Bjeren (1967) found a significant difference between the two groups in the educational level of their households. A significant difference between non-dropout and dropout girls and not between boys in the two comparison groups was associated with the literacy level of the heads of households. Bjeren interpretes this finding thus: "It might be that most people (in Ethiopia) think it is worthwhile to educate boys but that literate parents are more interested in keeping their daughters in school as well." (p. 65).

Bjeren's Ethiopian findings are further supported by evidence from Tanzania (Mbilinyi, 1969, 1974) and Uganda (Wallace, 1974). Mbilinyi's findings indicated that the primary school intake in Tanzania is drawn from rich, and to a certain extent, middle-level peasants. This finding is of major importance since most studies in developing countries do not seem to differentiate among "types" of peasants. Mbilinyi found expectations for schooling of offspring (schooling being perceived to be a means to a job) to be different among peasants of varying socio-economic means. She also found differential role expectations for

boys and girls. These two findings, however, were seen to be secondary to socio-economic factors and the stratification level of the household. Wallace's findings in Uganda showed mother's education to be particularly important in predicting educational opportunity for girls. This finding is to be understood within the greater context of values inculcated by a higher socio-economic status. In Africa, it has been observed that most 'educated' men also marry women who have had some education. In some cases, men marry women who have an educational attainment equal to their own. It is not inconceivable that such households would also tend to attach more value to their offsprings' education than less educated or illiterate parents.

In a Tunisian study, Simmons (1972) found the time a student had been exposed to learning French at the secondary-level and his SES-index to be positively and significantly related to French-language achievement. The items in Simmons' SES-index consisted of housing type, parents' education and income, parents' home reading and media use, education supervision at home, and urban experience. Simmons concluded that homework, and especially the physical conditions of home study, can have a significant effect on language achievement.

The 23-country International Education Achievement study (IEA reading comprehension data) found the family's SES, sex of the child, and availability of reading materials in the home to explain only 14 percent of the variance in reading comprehension. Their contribution in the developing countries was even smaller --- 1.5 percent in both Chile and India and about 8.7 percent in Iran (Thorndike, 1973). In the science data (Comber and Keeves, 1973), home circumstances were found to be positively and significantly related to science achievement. Here again, the mean variance explained by home circumstances was about 8 percent. The contribution was even smaller for the developing countries --- 2 percent for Chile, 4 percent for Iran and 0 percent for India. Home circumstances was a composite index of father's occupation, father's education, mother's education, use of dictionary, number of books in the home and family size. Problems of "multicollinearity" and a poor research design may probably explain the small effect of SES factors in the IEA study.

5.3. School Characteristics: School Type and School Quality: School-type generally refers to the social classification of the school. In the Kenyan case, the term is meant to encompass not only the official classifications of urban "High Cost" (that is, elitist), urban "Low Cost" (that is, non-elitist) and "rural" (that is, average, ordinary), but also to include the social charter effect as shown by the parenthetical notations. School-quality generally refers to the pedagogical learning attributes like type of school teachers and the material learning attributes (school equipment, buildings, books, facilities) that may hinder or promote school achievement, thus influencing repetition and dropout rates.

Different school types socialize their clients to have different expectations. Apart from organizational or curricular features of schools, students learn qualities associated with roles into which the schools are socially licenced to allocate them. This is part of the notion of the "social charter" that has been advanced by Meyer (1970: 2-3):

The effectiveness of a socializing organization is dependent on its Charter — the agreed upon social definition of its products. For example, a school whose graduates are generally understood to become members of an elite with broadly-defined powers will have much greater impact on the values of its students than will a school whose graduates are defined as eligible for limited roles.

The basic assumption of the charter is that the school's socializing effect is to a great extent dependent upon its ability to confer future status and rewards to its students. Moreover, the fact that the "chartered school" can be a means for future status gain has to be believed by the students, parents, teachers, and the society at large (Meyer, 1972: 139). This is particularly true of the stratified nature of the Kenyan schools. Because of their conspicuous nature, "High Cost" schools are highly esteemed and coveted by poorer folks; urban schools are also more highly regarded than rural schools but in general, schools (including those in rural areas) are judged on their ability to certify pupils for secondary selection. These social charter effects are reinforced by superior pedagogical and material learning endowments at such schools.

Studies in the United States though, have not always found the relationship to be consistent. In general, neither the amount and type of college teacher training, nor whether or not teachers are formally certified have been found to be significantly related to student performance. Pupil-teacher ratio has also generally been found insignificant although some studies have found it positively related to performance while others find a negative relationship (Keisling, 1971: 24 - 27). Physical facilities like presence of science laboratories, however, were found to be significantly related to performance. Dollar value of facilities per student and expenditures on books, however, were found to be insignificantly related to pupil performance (Keisling, p. 28).

In developing countries, however, the relationship between achievement and school characteristics has been more consistent. In a study of secondary schools in Malaysia, Beebout (1972) found the percentage of untrained teachers to be associated with low scores and library usage to increase achievement substantially. The International Education Achievement (IEA) science data, showed hours of homework; use of observations and experiments, and textbook availability to be consistently related to achievement.

A recent Ugandan study by Heyneman (1976) that sought to replicate the IEA experiment, found school facilities to have a larger impact in school achievement than student's socio-economic background. School effects were measured by combining teacher characteristics with those of a school's physical facilities. Five of the teacher characteristics (total years of schooling, teaching salary status grade, frequency of English in the childhood home, teaching experience, and parental education) aggregated to the school level, had little or no connection with academic performance. Only one characteristic of those measured, the quality of teacher's English, was significantly associated with achievement ( $r = .31$  at  $p < .01$ ). (pp. 205 - 206).

The relationships between a school's physical facilities and academic achievement of its pupils were consistent. For instance, books per child was correlated with mean school achievement ( $r = .24$  at  $p < .06$ ). Correlations between a tally of a number of other variables (the presence of a duplicating machine, a farm, a staff room, electricity, boarding facilities, a football or hockey field, and whether or not window frames — present in all schools — were filled with glass) and achievement ranged from a low of  $r = .081$  to a high of  $r = .330$  at  $p < .01$ , but were consistently positive (p. 206).

According to the foregoing discussion, in Kenya, we would expect to find schools of different types and quality to cater for different social class needs and in so doing to socialize pupils for different roles thus influencing school achievement and the repetition and dropout rates.

5.4. SES (Social Class) and School/Classroom Environment. In a narrower sense, school/classroom environment refers to pupil-teacher interaction, pupil motivation, and pupil participation in class and extracurricular activities. It is within this narrow scope that previous studies have investigated its influence on repetition and dropouts. In the broader and more holistic framework of our proposed research, however, school and classroom environment are seen as akinly related to the 'material' and pedagogical attributes of the school that have been discussed in the preceding sub-section under the notion of the social charter.

In their study of education, occupation, and earnings in U.S.A., Sewell and Hauser (1975) found a set of social-psychological factors (high school grades, parental and teacher encouragement of higher education, friends plans, and respondents' college plans and occupational aspirations) to account for additional variance in attainments and to explain how and why prior family background and ability affect attainment.

In their Nicaraguan study, Jamison and McNally (1975) found teacher experience to have a positive, significant effect on school attendance, but years of schooling attained by the teacher to be insignificant. Larger classes (typical of some poor schools and a spreading-thin of scarce educational resources) were found to have a significant effect on attendance. This finding implies that attendance figures reflect demand for high quality classroom interaction — experienced teacher, small pupil-teacher ratios, and so on (p.10). In Kenya, large numbers of pupils were seen to drop out in Standard I after the government 'abolished' school fees at the beginning of 1974. This may be seen as the effect of swollen numbers and the need for school committees to charge 'building fees' to put up new facilities and provide other amenities necessary to meet the enrollments explosion (Ministry of Education, Annual Report, 1974:14).



Using anthropological techniques to study the causes of the high dropout rates in the schools of the Alaska Bureau of Indian Affairs, Ray et al. (1962) concluded that dropouts in this part of the United States are a result of conflicts and problems faced by the students from a diversely different culture as they struggle to comprehend the imposed values of an educational system developed for a different group. They argued that the goals of schooling were often incomprehensible and at least as strange and irrational to the students as the students were to their teachers or educational authorities. The authors contend that the understanding of these conflicts might lead to a better school environment through improved student-teacher relationships and help the school establish more realistic expectations with regard to the academic performance of its products (p. 305). These arguments are analogous to what we might expect to be the causes of premature school leaving in the pastoral and other less developed areas of Kenya. King (1972: 395ff) has validated these claims at least in the case of the Maasai schools in the Narok District of Kenya.

But what seems to be at issue in the broad analysis of school/classroom environment is the role of anticipatory socialization that is characteristic of schools in capitalist societies. Writing on the "hidden curriculum" of schools, Rothstein (1974: 34) argues that the role of schools in capitalist society is to teach docility and subservience:

Schools in capitalist society... teach... willingness to accept authority's definitions of work and play, dependence for approval on authority more than on peers, willingness to perform relatively meaningless work with great regularity, and high valuation of money and things (customarily represented in school by credits and grades...

Wasserman's comments (1970) are even a more graphic illustration of the role and effects of schooling in capitalist societies. She speaks of her impressions of American schools in these blunt terms:

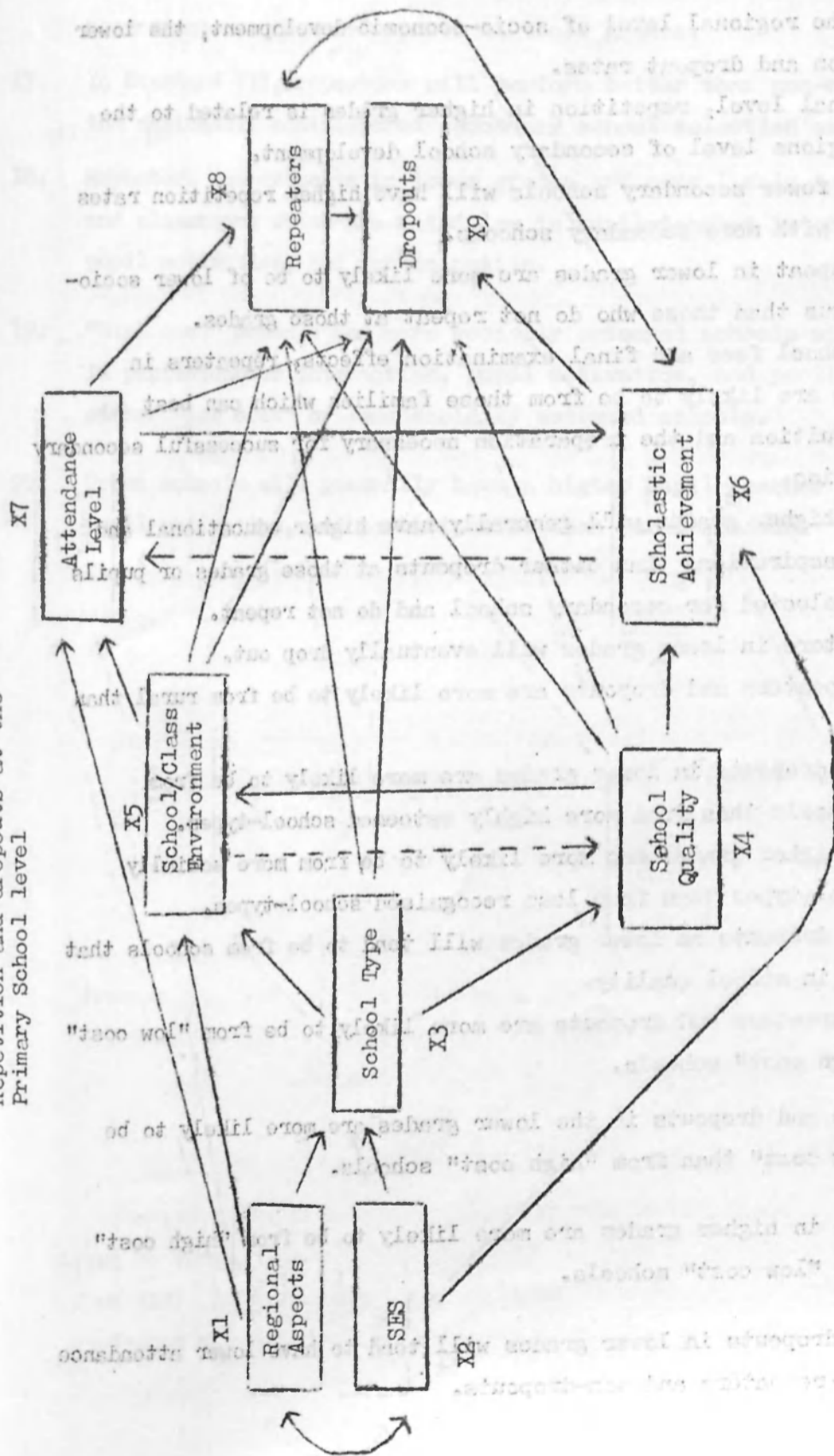
In re-reading my own notes on my (school) visits, I am most struck by the way in which the teacher (the classroom situation), in teaching the child how to be a pupil, alienates him from his fellows, from his body, from his feelings and impulses, from his immediate physical surroundings, from his opinions, from his language and thoughts, from his curiosity, and daily experiences — in other words, from all that he is as a human organism living and growing in a nourishing, sustaining environment. He is denied access to the very biologic and human well-springs whose flow is necessary to living and growing and converted into a little automaton who makes gestures and repeats answers to please an adult to whose signals of pleasure and displeasure he must become almost pathologically sensitized.

In a study of 260 youths who visited overnight hostels in eastern Canada; Loken (1973) found extreme alienation to be the cause of their school withdrawal. Two-Thirds of the students interviewed said they had left school voluntarily, usually for the reason that they had grown tired of the monotony of school and wanted to try something else and have new experiences (pp. 34-37).

5.5. Summary: Our discussion of the factors that would seem to influence repetition and dropouts in Kenya can be summarized as follows: pupils' family background characteristics first influence their admission to schools of different types and quality; these in turn interact to bring about a learning environment which may be conducive to repetition and/or dropping out. Further, pupils' family background may influence attendance rates thus contributing to repetition or resulting in dropouts. Regional factors may intervene through disparities in educational development and allocation of resources but these interact with pupils' family background leading to either repetition or dropouts. The nature of inter-relationships that our preceding discussion suggests is summarized in the model overleaf.

The evidence that we have reviewed seems to call for a re-thinking of the role of schooling, learning environments, and the nature of stratification especially in developing societies. The weight of the evidence seems to suggest that ascription and achievement are equally as operative and the process is in part a lottery. The cruel hoax, however, may be that most people (including unsuccessful pupils who repeat or have to drop out) continue to feel that the outcome is their own fault. This is the argument so poignantly advanced by Richard Senneft and Jonathan Cobb in their best-selling book, The Hidden Injuries of Class (New York: Basic Books, 1973).

Fig. 3: Kenya: Socio-economic determinants of Repetition and dropouts at the Primary School level



THE MODEL OF THE HYPOTHESIZED INTER-RELATIONSHIPS BETWEEN THE INDEPENDENT AND THE DEPENDENT VARIABLES

6.0. STATEMENT OF THE HYPOTHESES

To assess the validity of the arguments we have made on the causes of repetition and dropouts, we propose to test the following hypotheses:

1. The higher the regional level of socio-economic development, the lower the repetition and dropout rates.
2. At the national level, repetition in higher grades is related to the different regions level of secondary school development.
3. Regions with fewer secondary schools will have higher repetition rates than regions with more secondary schools.
4. Pupils who repeat in lower grades are more likely to be of lower socio-economic status than those who do not repeat at those grades.
5. Because of school fees and final examination effects, repeaters in higher grades are likely to be from those families which can best provide the tuition and the preparation necessary for successful secondary school selection.
6. Repeater in higher grades will generally have higher educational and occupational aspirations than either dropouts at those grades or pupils who are not selected for secondary school and do not repeat.
7. Regular repeaters in lower grades will eventually drop out.
8. Generally, repeaters and dropouts are more likely to be from rural than urban schools.
9. Repeater and dropouts in lower grades are more likely to be from low-status schools than from more highly esteemed school-types.
10. Repeater in higher grades are more likely to be from more socially esteemed school-types than from less recognised school-types.
11. Repeater and dropouts in lower grades will tend to be from schools that are rated low in school quality.
12. In Nairobi, repeaters and dropouts are more likely to be from "low cost" than from "high cost" schools.
  - a) Repeater and dropouts in the lower grades are more likely to be from "low cost" than from "high cost" schools.
  - b) Repeater in higher grades are more likely to be from "high cost" than from "low cost" schools.
13. Repeater and dropouts in lower grades will tend to have lower attendance rates than non-repeaters and non-dropouts.

14. Repeaters and non-dropouts in higher grades will both have higher attendance rates than dropouts at those grades.
15. Attendance rates will generally be lower in rural than urban areas.
16. Repeaters and dropouts in lower grades will have lower scores than non-repeaters and non-dropouts at those grades.
17. In Standard VII, repeaters will perform better than non-repeaters in the nationally administered secondary school selection examination.
18. Repeaters and dropouts in lower grades are more likely to be from schools and classrooms which are rated low in pupil-teacher interaction, pupil motivation, and participation.
19. "High cost" schools and more socially esteemed schools will be higher in pupil-teacher interaction, pupil motivation, and participation than either "low cost" or less socially esteemed schools.
20. Urban schools will generally have a higher pupil-teacher interaction, pupil motivation, and participation than rural schools.

## 7.0. OPERATIONALIZATION OF THE VARIABLES

### 7.1. Part I:

7.1.1. Level of regional economic development refers to those quantifiable material characteristics of development like cash crops, volume of trade and commerce, level of recorded employment, social services like hospitals, health clinics, etc., government-financed projects, infrastructure like roads, density of population, and so on, which can be used to differentiate one region from another.

7.1.2. Level of regional educational development refers to those indicators of educational advancement like percent of school age children in school, per-pupil expenditures in primary education, number of teachers (trained and untrained), overall number of schools, and allocation of educational resources like school materials, equipment, and so on, which can be used to differentiate among regions.

7.1.3. Independent and Dependent Variables. The indicators of regional economic and educational development are the independent variables. Repetition and dropout rates are the dependent variables.

7.1.4. Repetition rate refers to the percentage of repeaters per enrollment at each grade, type of school or region. It is calculated by dividing the number of repeaters by the number of enrollments at a particular level and by multiplying by 100.

7.1.5. Dropout rate refers to the percentage of dropouts at a specified point or level adjusted for repeaters and transfers where known. The dropout rate for each grade, type of school, and region is calculated by dividing the number of dropouts by the number of enrollments and multiplied by 100.

7.1.6. Repeaters and Dropouts. For this part of the study, repeaters refer to the number of those pupils who are categorized by the Ministry of Education as having repeated a grade(s). Dropouts refer to the number of pupils who have withdrawn from school prior to completion of Standard VII. This number will be deduced from Ministry of Education school-flows adjusted for repeaters (and transfers where known).

7.1.7. Transfers refer to pupils who have shifted to other schools. .S.S.

7.2. Part II:

7.2.1. The independent variables chosen for this part of the study are family socio-economic background of the pupil (SES), school-type, school environment, school quality, attendance level, repetition rate and scholastic achievement.

i.) SES refers to father's education, father's occupation and the family's gross income. The gross family income will be computed in Kenya shillings on the basis of all monetary earnings of the family, number of livestock, size and type of land, cash crops, family possessions like type of house, ownership of car, radio, TV, and so on.

ii.) School-type refers to the Ministry of Education classification of school as to whether urban high-cost, urban low-cost, or average rural.

iii.) School quality refers to the physical, material and pedagogical attributes of a school which may influence a pupil to repeat or drop out. These are taken to mean type of school buildings and facilities, equipment and teaching materials, the educational level, professional training and teaching experience of the teachers.

iv.) School environment refers to pupil-teacher interaction, pupil motivation and participation in class and extra-curricular activities.

v.) Attendance level is a computed rate of presence at school per term/year to be able to participate effectively in the prescribed curriculum.

vi.) Repetition rate refers to the number of years a pupil has repeated grade(s) to the extent that it may discourage him/her and lead to early withdrawal.

vii.) Scholastic achievement refers to academic performance in School-administered end of term and end of year examinations. For Standard VII, the final grade in primary school, this refers to performance in the nationally-administered Certificate of Primary Education (CPE) examination.

7.2.2. The dependent variables for this part of the study are classification into either one of these four categories:

repeater or non-repeater, dropout or non-dropout. Classification of pupils into these four categories will be undertaken after the completion of our field study.

- i.) Repeaters refer to those pupils who will be found to have repeated a grade(S).
- ii.) Dropouts refer to those pupils who are found to have left school any time during the course of the year of our study. Generally, dropping out, premature leaving, or desertion, refer to withdrawal from school any time before the completion of the final year of primary school. In Kenya, this refers to withdrawal before completion of Standard VII.

7.2.3. Control Variables: As already stated, the independent variables chosen for this part of the study are SES, school-type, school quality, school environment, attendance level, repetition rate, and scholastic achievement.

But according to our review of the literature, certain other variables have been seen to modify the relationship between the independent and the dependent variables: These are listed below and will be controlled for.

- 1. Sex
- 2. mother's education
- 3. number and order of siblings
- 4. school location
- 5. regional background
- 6. residential background
- 7. pre-primary education (nursery schooling)
- 8. pupil/teacher ratio
- 9. school boarding
- 10. school feeding
- 11. language of instruction



7.2.4. THE TYPOLOGY OF VARIABLES AND INDICATORS FOR PART II

- i.) SES:
- Father's education
  - Father's occupation
  - Gross family income

- ii.) School-type:
- Urban high-cost
  - Urban low-cost
  - Average rural

- iii.) School quality:
- Type of school buildings and facilities
  - Equipment and teaching materials
  - Educational level, professional training and teaching experience of the teachers

- iv.) School environment:
- Pupil-teacher interaction
  - Pupil motivation and participation in class and extra-curricular activities

- v.) Attendance level:
- Calibrated rate of attendance/non-attendance per school term or year

- vi.) Repetition rate:
- Number of times repeated a grade(S)

- vii.) Scholastic Achievement:
- End of term and end of year class grades
  - Scores in CPE

### 8.0. DESIGN OF THE STUDY

The main rationale of this study is to investigate the socio-economic causes behind the high dropout and repetition rates in the primary schools of Kenya, which has greatly influenced its design. While Part I of the research tries to quantify the phenomena of repetition and dropouts at the national level and then to relate their incidence to levels of regional economic and educational development, Part II of the research is an attempt to study the problems in the field in a more in-depth manner. In analyzing the school-flows from 1970 when data are available, Part I will rely heavily on published and unpublished official records and documents while Part II will utilize field data. Both parts, however, will be integrated as much as possible to form a dynamic analysis of the causes of repetition and dropouts in the primary schools of Kenya. It is the design for Part II which is discussed in somewhat more detail below.

The purpose of this part of the investigation is to study the incidence of repeaters and dropouts in all the seven grades of the primary school system in 14 schools in four representative regions of Kenya in a given year. This will for example, enable us to locate those points where most repeaters and dropouts occur thus also enabling us to evaluate the efficiency of the government directive that abolished school fees for the first four grades in 1974. The units of analysis are therefore the pupil, the grade he/she is in, the school, and region.

The regions chosen for study are Nairobi, Central Province (Kiambu District), Nyanza Province (Kisumu District), and North-Eastern Province (Garissa District). The regions have been chosen in such a way as to reflect a cross-section of the social stratification that has been discussed along the dimensions of economic and educational development.

The 14 schools will be decided upon by convenience of accessibility and allocated among the regions on a very rough weighting by enrollments, thus:

1. Nairobi: 4 schools (2 high cost; 2 low cost)
2. Central Province: 5 schools (4 rural; 1 urban)
3. Nyanza Province: 3 schools (2 rural; 1 urban)
4. North-Eastern: 2 schools (1 rural; 1 urban)

The total sample will consist of about  $N = 3,000$  pupils.

No pretence is made at random sampling of the schools since this is both beyond our scope in terms of time and funds and since the import of our study is to understand the socio-economic phenomena influencing repetition and dropping out among pupils of differing social backgrounds, in schools of different types, and in regions at different levels of economic and educational development. If enough funds are forth-coming, however, we may include more schools in our study.

Notwithstanding this limitation, it can be said that most rural schools in Kenya are near-homogenous in the kind of clientele they cater for and that any noticeable differences in school quality can be used to explain the educational process that pupils go through. But to the extent that the four regions chosen represent the extremities in economic and educational development discussed under our conceptual framework, any findings from our study can be easily generalized to other regions and districts of Kenya at a similar stage in economic and educational development. With caution, the findings of our study can also be generalized to other developing countries at a similar stage in development and following a similar model of development as Kenya.

#### 9.0. DATA COLLECTION

Data for Part I will be collected from government sources (particularly the Ministries of Finance and Planning and Education), UNESCO, and the World Bank. These data will be enriched through in-depth interviews with leading government officials, politicians and community leaders.

The main instrument of the field survey will be a self-administered questionnaire in which pupils will be treated as respondents and informants. Great caution will be exercised in interviewing younger children in the lower grades. Whenever possible interviewers will be used for this group or the relevant information obtained from older siblings in or out of school.

The questionnaire will be field-tested in rural and urban areas of Kenya and any inappropriate items deleted or improved.

The questionnaires will be circulated promptly at the beginning of the school year to avoid losing any precious opportunity in spotting early dropouts. Family background information of the pupils will therefore as much as possible be gathered early in the school year. Schools will specifically be urged to cooperate in keeping records of attendance, transfers, repeaters, and dropouts.

throughout the course of the study. Additional information on repetition will be gathered retroactively from school records. At the end of the school year, schools will be contacted to ascertain those who dropped out, those repeating the year, and those that have been promoted to the next higher grade. As was noted earlier, the relevant information on these categories will already have been gathered. The importance of this design is its "randomness" in picking out those who repeat, drop out, or are promoted, yet without the "post-hoc" rationalization characteristic of some dropout studies. Interviewing pupils while they are still in school also helps minimize the enormous problems encountered in developing countries in trying to locate pupils after they have already left school.

School resources and other characteristics of the schools will be studied through in-depth interviews with teachers and through participant-observation in a select number of schools. Attempts will be made to enlist the services of trainee-teachers to observe classroom and school environments during their teaching practice. In-depth interviews will also be carried out with a select number of pupils and parents and attempts will be made to know and relate to them on a person-to-person basis in order to better understand some of the social-psychological dimensions that may be involved in repeating and/or dropping out. Efforts will also be made to observe the school-community relations.

10.0. DATA ANALYSIS

For Part I, measures of regional economic and educational development will be developed using inter analysis and the inter-correlations of the scales obtained. The distribution of the measures for each indicator will be divided at the median into high and low categories for analysis purposes, for example:

- high measure of trade and commerce \_\_\_\_\_ low repetition/dropout rates
- low measure of trade and commerce \_\_\_\_\_ high repetition/dropout rates
- high expenditures on education \_\_\_\_\_ low repetition/dropout rates
- low expenditures of education \_\_\_\_\_ high repetition/dropout rates

... etc ....

Chi-X<sup>2</sup> comparisons will be performed using the groups. The measures will then be entered in a multiple regression model to ascertain the power of the different independent variables in explaining repetition and dropout rates at the national level among types of schools, across regions, and between rural and urban areas.

For Part II, measures for SES will be quantified to form an index of "parental advantage" for repeaters and non-repeaters, dropouts and non-dropouts, and for those promoted to secondary and for those not promoted. Other indices for these groups will be formed for school-type, school-quality, school/classroom environment, attendance, and scholastic achievement. The groups will then be compared by the means of a discriminant analysis along the dimensions of the stipulated independent variables. The analysis will be undertaken in a recursive manner according to the model of the hypothesized inter-relationships between the independent and the dependent variables shown on page 35, such that:

$$X_3 = f(X_1 + X_2)$$

$$X_4 = f(X_1 + X_2 + X_3)$$

$$X_5 = f(X_1 + X_2 + X_3 + X_4)$$

$$X_6 = f(X_1 + X_2 + X_3 + X_4 + X_5)$$

$$X_7 = f(X_1 + X_2 + X_3 + X_4 + X_5 + X_6)$$

$$X_8 = f(X_1 + X_2 + X_3 + X_4 + X_5 + X_6 + X_7)$$

$$X_9 = f(X_1 + X_2 + X_3 + X_4 + X_5 + X_6 + X_7 + X_8)$$

The model of the hypothesized inter-relationships between the independent and the dependent variables for the comparison groups is assumed linear, and can be represented thus:

$$D_i = d_{i1} X_1 + d_{i2} X_2 + \dots + d_{i9} X_9$$

where  $D_i$  is the score on the discriminant function for group  $i$ , the  $d$ 's are weighting coefficients, and the  $X$ 's are the standardized values of the 9 discriminating variables used in the analysis.

Discriminant analysis is a multivariate technique that distinguishes between two or more groups on a set of "discriminating variables" that measure characteristics on which the groups are expected to differ. The technique attempts to do this by forming one or more linear combinations of the discriminating variables. The analysis aspects of the method also provide several tools for the interpretation of the data. Among these, are statistical tests for measuring the success with which the discriminating variables actually discriminate when combined into discriminant functions (Nie et al., 1975 : 434 - 467).

The choice of this particular statistical technique has been necessitated by the weaknesses of the traditional multiple regression method for our research purposes and after expert advice at Stanford University and elsewhere. \*\*\* That this technique has also been widely used in educational research is evident in the literature (for a review, see Hiberty, 1975: 45.4: 543 - 598; Bruno, 1976: 107-283).

\*\*\* Many thanks are particularly due to Ta Ngoc Chou and Gabriel Carron, both of the International Institute for Educational Planning (IIEP/UNESCO), Paris, for their expert advice on certain methodological aspects relating to this project.

## 11.0. BIBLIOGRAPHY

- Abernethy, David, The Political Dilemma of Popular Education: An African Case. (Stanford, Calif.: Stanford University Press, 1969).
- Becker, Gary S., "Investment in Human Capital: A Theoretical Analysis." Journal of Political Economy (Supplement), Vol. LXX, October 1962.
- Beebout, Harold S., "The Production Surface for Academic Achievement: An Economic Study of Malaysian Secondary Education." Unpublished Ph.D. dissertation. (University of Wisconsin at Madison: Department of Economics, 1972).
- Beirn, R., Kinsey, D., and McGinn, N., Antecedents and Consequences of Early School Leaving: An Analytical Survey of Research Activities. (Harvard University: Centre for Studies in Education and Development, 1972).
- Bienen, A., Kenya: The Politics of Participation and Control. (Princeton, N.J.: Princeton University Press, 1974).
- Bjeron, G., Makelle (Ethiopia) Elementary School Drop-Out, 1967. (Uppsala, Sweden: Scandinavian Institute of African Studies. Research Report # 5, 1969).
- Bock, J., and Papagiannis, G., "The Demystification of Non-Formal Education." (Stanford University: School of Education. Unpublished ms., 1975).
- Brimer, M.A., and Pauli, L., Wastage in Education: A World Problem. (Paris: UNESCO, International Bureau of Education, 1971).
- Brownstein, L., Education and Development in Rural Kenya: A Study of Primary School Graduates. (New York: Praeger, 1972).
- Bruno, J.E., "Discriminant Analysis: Some Issues Related to Educational Problems of Classification." Chapter 4 in Bruno, J.E., Educational Policy Analysis: A Quantitative Approach. (New York: Crane, Rusak and Co., 1976).
- Carnoy, Martin, "Earnings and Schooling in Mexico." Economic Development and Cultural Change. July 1967.
- \_\_\_\_\_, "Class Analysis and Investment in Human Resources: A Dynamic Model." The Review of Radical Political Economics, Vol. III, #4, Fall-Winter, 1971.
- \_\_\_\_\_, (ed.), Schooling in a Corporate Society. (New York: McKay, 1972).
- \_\_\_\_\_, "Notes on Schooling and Income Distribution." (Stanford University: School of Education. Unpublished ms., 1973).
- Carnoy, Martin, and Levin, H.M., The Limits of Educational Reform. (New York: McKay, 1976).
- Chenery, Hollis and others, Redistribution with Growth: Policies to Improve Income Distribution in Developing Countries in the Context of Economic Growth. (Oxford University Press, 1974).